

CLAIMS

1. System for remote control of apparatuses, enabling the interconnection between at least one broker and at least one remote apparatus according to the MQIsdp protocol,
characterised in that it associates, with at least one of said remote apparatuses,
5 radiocommunication means capable of internally processing a communication protocol implementing API-type source functions available in a software platform (Open AT) enabling at least one application to be embedded,
and in that said radiocommunication means are provided with a set of specific (API) functions enabling data to be exchanged with at least one server
10 implementing said MQIsdp protocol,
so as to enable an interconnection between said broker(s) and said remote apparatus(es) via said radiocommunication means, with the latter also managing at least one application between said broker(s) and said remote apparatus(es).
2. System for remote control of apparatuses according to claim 1,
15 characterised in that said radiocommunication means include a radiocommunication module, grouping together on a single substrate all of the radiofrequency and baseband data processing means, as well as means for managing said (API) functions and said application(s).
3. System for remote control of apparatuses according claim 1, characterised
20 in that said radiocommunication means integrate said MQIsdp protocol in the form of a library, defining said set of specific (API) functions.
4. System for remote control of apparatuses according to claim 1, characterised in that, at least in a first mode, said radiocommunication means manage only the signalling of a data exchange, with said data being transferred
25 directly from a remote apparatus to a server, or the reverse.
5. System for remote control of apparatuses according to claim 1, characterised in that, at least in a second mode, said radiocommunication means manage the signalling of a data exchange and the transfer of said data, with the latter being temporarily stored in at least one buffer storage.

6. System for remote control of apparatuses according to claim 5, characterised in that the size of said buffer storage(s) is parameterable.

7. System for remote control of apparatuses according to claim 6, characterised in that it operates in said first mode when the size of said buffer storage(s) is 0, and in said second mode if not.

8. System for remote control of apparatuses according to claim 1, characterised in that said set of specific API functions includes functions enabling:

- the connection to one of said brokers;
- 10 - the sending of messages;
- the receiving of messages;
- configuration of at least one parameter.

9. System for remote control of apparatuses according to claim 1, characterised in that at least some of said specific (API) functions are organised so as to be capable of providing at least two operations and/or acting on at least two distinct aspects, according to a predefined parameterisation.

10. System for remote control of apparatuses according to claim 1, characterised in that said set of (API) functions includes only 12 functions.

11. System for remote control of apparatuses according to claim 1, characterised in that said set of specific (API) functions includes an initialisation function (mqisdp_init) restoring default parameters, which must be called at least once before the use of other (API) functions.

12. System for remote control of apparatuses according to claim 1, characterised in that said set of specific (API) functions includes a function (mqisdp_resume) called when an IP connection has been established.

13. System for remote control of apparatuses according to claim 1, characterised in that it includes a function of establishing a connection with one of said brokers (mqisdp_connect), making it possible to define parameters of said connection, and a function for disconnecting (mqisdp_disconnect) said connection.

14. System for remote control of apparatuses according to claim 13, characterised in that said function of establishing a connection makes it possible to select a transmission mode from at least two (GSM and GPRS).

15. System for remote control of apparatuses according to claim 1, characterised in that it includes a function (mqisdp_publish) for sending a message to one of said brokers.

16. System for remote control of apparatuses according to claim 1, characterised in that it includes a function for subscribing to one of said brokers (mqisdp_subscribe), and a function for unsubscribing (mqisdp_unsubscribe) to said broker.

17. System for remote control of apparatuses according to claim 1, characterised in that it includes at least one function for requesting information on at least one aspect of a communication in progress.

18. System for remote control of apparatuses according to claim 17, characterised in that it includes at least one of the functions belonging to the group including:

- a function for inquiring about the status of a connection (mqisdp_getConStatus);
- a function for inquiring about the status of a given message (mqisdp_getMsgStatus);
- a function for inquiring about the current size of a queue (mqisdp_getQueueSize);
- a function for inquiring about the space available in a queue (mqisdp_getAvailableSize).

19. System for remote control of apparatuses according to claim 1, characterised in that it includes a function for defining the size of a queue (mqisdp_setQueueSize).

20. Method for remote control of apparatuses, enabling the interconnection between at least one broker and at least one remote apparatus according to the MQIsdp protocol,

characterised in that it associates, with at least one of said remote apparatuses, radiocommunication means capable of internally processing a communication protocol implementing API-type source functions available in a software platform (Open AT) enabling at least one application to be embedded,

5 and in that it implements, in said radiocommunication means, a set of specific API functions enabling data to be exchanged with at least one broker implementing said MQIsdp protocol,

so as to enable an interconnection between said broker(s) and said remote apparatus(es) via said radiocommunication means, with the latter also managing

10 at least one application between said broker(s) and said remote apparatus(es).

21. Radiocommunication device characterised in that it includes radiocommunication means implemented in a system for remote control of apparatuses according to any one of claims 1 to 19.

22. Radiocommunication module characterised in that it includes
15 radiocommunication means implemented in a system for remote control of apparatuses according to any one of claims 1 to 19.

23. Set of (API) functions implemented in a system for remote control of apparatuses, characterised in that it enables data to be exchanged with at least one broker implementing said MQIsdp protocol.